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a plurality of processing nodes sharing said independent data communication lines for data communication;

one of said processing nodes being connected for both transmitting and receiving on a first subset of said data communication lines and being connected for only receiving on a
5 second subset of said data communication lines; and

another of said processing nodes being connected for both transmitting and receiving on said second subset of said data lines and being connected for only receiving on said first subset of said data lines.

10 16. (Amended) A network topology backplane bus architecture comprising:

a plurality of processing nodes transmitting and receiving data communications;

a plurality of independent data communication networks formed of a plurality of independent data communication lines, a subset of said data communication networks extending between ones of said plurality of processing nodes;

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15 a first subset of ones of said data communication lines allocated to a first of said processing nodes for transmitting and receiving data communications, said first subset of said data communication lines further allocated to a second of said processing nodes for monitoring data communications transmitted on said first subset of said data communication lines and receiving data communications as a function of said monitoring of said data communications
20 transmitted on said first subset of said data communication lines;

a second subset of ones of said data communication lines allocated to said second processing nodes for transmitting and receiving data communications, said second subset of said data communication lines further allocated to said first processing nodes for monitoring data communications transmitted on said second subset of said data communication lines and
25 receiving data communications as a function of said monitoring of said data communications transmitted on said second subset of said data communication lines.

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30. (Amended) A method of sharing independent data communication lines for fault tolerant data communication among a plurality of processing nodes, the method comprising:

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dividing a plurality of data communication lines into mutually exclusive first and second subsets of data communication lines;

5 permitting ~~to~~ first processing nodes both transmitting and receiving privileges on a ~~said~~ first subset of data communication lines and ~~permitting receiving privileges to~~ limiting second processing nodes to only receiving privileges on said first subset of data communication lines;

permitting to the second processing nodes both transmitting and receiving privileges on said second subset of data communication lines and ~~permitting receiving privileges to~~ limiting the first processing nodes to only receiving privileges on said second subset of data communication lines.

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34. (Amended) A method of sharing independent data communication lines for fault tolerant data communication among a plurality of processing nodes, the method comprising:

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15 permitting first processing nodes to both transmit and receive on a first subset of data communication lines and ~~permitting limiting~~ the first processing nodes to only monitor transmissions on a second subset of data communication lines and to receive transmissions as a function of detecting transmissions on a ~~said~~ second subset of data communication lines;

20 permitting second processing nodes to both transmit and receive on said second subset of data communication lines and ~~permitting limiting~~ the second processing nodes to only monitor transmissions on said first subset of data communication lines and to receive transmissions as a function of detecting transmissions on said first subset of data communication lines.

REMARKS

Claims 1-34 remain in the case. Claims 1, 16, 30 and 34 are amended.

Claim Rejections Under 35 USC § 102

25 Claims 1, 16, 30 and 34 were rejected under 35 USC § 102(b) over US Patent 3,755,628 to Games et al.

The present invention is clearly patentable over the Games reference which teaches a multi-redundant data synchronized transmission system having multiple